PETER A. DEFAZIO
4TH DISTRICT, OREGON

TRANSPORTATION AND
INFRASTRUCTURE
CHAIRMAN

PLEASE RESPOND TO:

☐ 2134 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-3704
(202) 225-6416

☐ 405 EAST 8TH AVENUE, #2030
EUGENE, OR 97401
(541) 465-6732
1-800-944-9603

☐ 125 CENTRAL AVENUE, #350
COOS BAY, OR 97420
(541) 269-2609

☐ 612 SE JACKSON STREET, #9
ROSEBURG, OR 97470
(541) 440-3523

☐ defazio.house.gov

Congress of the United States
House of Representatives

April 15, 2019

227

Chairman Ajit Pai
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Pai and Acting Commissioner Sharpless:

I write to inquire about the status of the federal government's research into the potential health effects of radiofrequency (RF) radiation and its relation to the Federal Communications Commission's (FCC) current guidelines for what it considers to be safe RF exposure levels for humans.

As you know, the impending rollout of 5G technology will require the installation of hundreds of thousands of "small cell" sites in neighborhoods and communities throughout the country, and these installations will emit higher-frequency radio waves than previous generations of cellular technology. This means that Americans will be exposed to more non-ionizing RF radiation than ever before.

The FCC's current guidelines for RF safety were adopted in 1996, a time when our society's relationship with and understanding of wireless technology was much different than it is today. In fact, in August 2012 – almost seven years ago – the Government Accountability Office (GAO) released a report recommending that the FCC "should formally reassess and, if appropriate, change its current RF energy exposure limit and mobile phone tested requirements…"[1] The report continued:

> The [FCC's] RF energy exposure limit may not reflect the latest research, and testing requirements may not identify maximum exposure in all possible usage conditions…By not formally reassessing its current limit, FCC cannot ensure it is using a limit that reflects the latest research on RF energy exposure. FCC has also not reassessed its testing requirements to ensure that they identify the maximum RF energy exposure a user could experience.

While I was pleased to see the FCC seek comments in 2013 on whether its RF safety guidelines should be reassessed,[2] it is unacceptable that six years later the FCC still has not conducted a reassessment of its 1996 guidelines.

Meanwhile, concern about exposure to RF radiation has been increasing. My constituents in southwest Oregon have expressed their concerns regarding possible health effects from increased RF exposure, particularly in light of upcoming 5G technology. They are not alone – Americans across the country are expressing similar worries about possible adverse health effects from this technology, and they are understandably demanding answers from the federal government.

Moreover, states and municipalities across the country, including in my congressional district, are hearing from citizens who are concerned about this technology being installed in their communities. Yet

---

[1] Government Accountability Office, "Exposure and Testing Requirements for Mobile Phones Should Be Reassessed," GAO-12-771, July 2012, https://www.gao.gov/assets/600/592901.pdf.

[2] Federal Communications Commission, "Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies: Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields," FCC 13-39, 29 March 2013, https://docs.fcc.gov/public/attachments/FCC-13-39A1.pdf.

because Section 704(a) of the Telecommunications Act of 1996 – legislation which I opposed – expressly prohibits state and local governments from regulating wireless infrastructure based on RF emissions, and because the FCC's onerous new clarifying rules[3] usurp local control over 5G small cell installations, states and municipalities are forced to depend on the federal government for information about the safety of 5G technology.

It is clear that the federal government has not been transparent enough about the current status of 5G RF radiation research and its guidelines on RF exposure limits. As Senator Richard Blumenthal noted in a February 2019 Senate hearing,[4] the FCC's and FDA's responses to congressional inquiries on this issue have been less than satisfactory, merely reiterating general statements that 5G technology is safe without citing specific research or studies.

Even though the FDA states that it "believes the weight of scientific evidence does not show an association between exposure to radiofrequency from cell phones and adverse health outcomes," it also states that "there is consensus that additional research is warranted to address gaps in knowledge…"[5]

I request the FCC and FDA provide answers to the following questions:

1. What scientific literature or research has the FCC and FDA used to determine that 5G technology will not cause any adverse health effects in humans? Please cite specific studies and research conducted.

2. What gaps exist in our current understanding of possible health effects from 5G technology, as well as the possible health effects of RF radiation writ large?

3. What efforts has the federal government taken to educate the public, as well as state and local governments, about its research on RF radiation and safety guidelines as it relates to 5G technology?

I strongly urge the FCC, FDA, and relevant agencies to be open and transparent about the research and methods used for determining RF safety guidelines, as well as any outstanding questions your agencies may have about this new technology. Full transparency is needed, and the American people expect and deserve no less from their government.

I look forward to your reply.

Sincerely,

PETER A. DEFAZIO
Member of Congress

---

[3] Federal Communications Commission, "Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment," FCC 18-111, 2 August 2018; https://docs.fcc.gov/public/attachments/FCC-18-111A1.pdf; and FCC 18-133, 26 September 2018, https://docs.fcc.gov/public/attachments/FCC-18-133A1.pdf.

[4] Senate Committee on Commerce, Science, and Transportation; Hearing: "Winning the Race to 5G and the Next Era of Technology Innovation in the United States," 02:03:59 – 2:08:50, 6 February 2019, https://www.commerce.senate.gov/public/index.cfm/hearings?ID=06336057-CC60-45DF-A361-32D7401EE6CB.

[5] U.S. Food and Drug Administration, "Radiation-Emitting Products: Current Research Results," https://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/ucm116335.htm

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

April 30, 2019

The Honorable Peter A. DeFazio
U.S. House of Representatives
2134 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman DeFazio:

Thank you for your correspondence concerning radiofrequency (RF) issues and for sharing your views about the potential impact of 5G deployment on RF exposure. Please be assured that the Federal Communications Commission places a high priority on the safety of wireless services and devices and relies upon verified engineering and scientific data as we carry out our mission.

As an initial matter, I note that you have addressed this letter to me as well as Acting Commissioner Sharpless. Because we are an independent regulatory agency, I will answer you individually as FCC Chairman.

The FCC relies on the expertise of health and safety agencies and organizations with respect to appropriate levels of RF exposure. Our current RF exposure limits incorporate recommendations from the U.S. Environmental Protection Agency, the U.S. Food and Drug Administration, and other federal health and safety agencies. And these limits are derived from exposure limits recommended by the Institute of Electrical and Electronics Engineers, Inc. and the National Council on Radiation Protection and Measurements. Both these institutions have extensive experience and knowledge in RF-related issues and have spent a considerable amount of time evaluating published scientific studies that can inform appropriate exposure limits.

Importantly, the FCC has an ongoing rulemaking related to this matter. Specifically, the FCC adopted a Report and Order, Further Notice of Proposed Rulemaking, and Notice of Inquiry in 2013. The Report and Order resolved several issues related to measurements and exemptions raised, reevaluating some and modifying them to reflect the latest information available and usage and deployment patterns. The Further Notice of Proposed Rulemaking sought comment on further changes to our rules. And the Notice of Inquiry sought public input on whether our basic RF exposure limits should be revisited. The record in the proceeding is voluminous, with over one thousand filings (totaling more than 20,000 pages). FCC staff is considering all of this evidence as it determines whether and in what way changes to our rules in this area should be made.

I also would note that we have sponsored groups of congressional staffers at our Columbia, Maryland testing facilities to see and speak with our engineers and technicians as they operate the RF testing equipment to ensure proper compliance with engineering standards. Earlier this year, more than 20 staffers attended our program and we hope to have another group

visit this coming summer. My staff would be happy to invite your staff to our next scheduled program.

Please let me know if I can be of further assistance.

Sincerely,

Ajit V. Pai

Ajit V. Pai